AMENDMENTS TO THE SPECIFICATION

Please replace page 10, line 1 through page 11, line 31 of the disclosure with the following text:

A. PID-Enabled Data Network Telephony System

FIG. 1 is a block diagram showing an exemplary embodiment of a system 100 for enabling encryption and/or authentication on a telephony network according to the present invention. The system includes a data network 106. A first voice communication device 108 is linked to a first access network 112 via connection 111, and may communicate over the data network 106 by connecting via the first access network 112. A second voice communication device 118 is linked to a second access network 114 through connection 119 and may communicate over the data network 106 by connecting via the second access network 114.

The data network 106 in the system 100 typically includes one or more Local Area Networks (LANs) connected to one another or to a Wide-Area Network (WAN), such as an Internet Protocol (IP) network, to provide wide-scale data connectivity. The data network 106 may use Voice Over Packet (VOP) schemes in which voice signals are carried in data packets. The network 106 may also include a connection to the Public Switched Telephone Network (PSTN) to allow for voice connections using traditional circuit switching techniques. In one embodiment, the data network 106 may include one or more LANs such as Ethernet LANs and support data transport protocols for performing Voice-over-Internet-Protocol (VoIP) techniques on the Internet. For further details regarding VoIP, see the information available through the Internet Engineering Task Force (IETF). ~~at www.ietf.org.~~ In addition, an Internet Telephony gateway may be included within the system 100 to allow for voice connections to users connected by subscriber lines at a PSTN Central Office.

The voice communication devices 108 and 118 typically include a voice input, a voice output, and a voice processing system (described further below with reference to FIG. 3, illustrating an exemplary embodiment of the voice communication devices). The

voice processing system converts voice sound to digital data signals that are communicated on a voice connection over the data network. The voice processing system also converts digital data signals received from the voice connection to voice sound. The voice communication devices 108 and 118 typically include a central processing unit and memory to store and process computer programs. Additionally, each of the voice communication devices 108 and 118 typically includes a unique network address, such as an IP address, in memory to uniquely identify the voice communication device 108 or 118 to the data network 106 and to permit data packets to be routed to the device.

A PID 110 is shown linked to the first voice communication device 108 via a link 109. The PID 110 may communicate information to the second voice communication device (or a second PID linked to the second voice communication device 118) over the data network 106 by connecting through the first voice communication device 108 and across the first access network 112. It should be noted that although the PID 110 is shown as part of the system 100, communication is still possible in the absence of PID 110. Additional telephony services, such as encryption and/or authentication services, may be introduced with the use of one or more PIDs, such as PID 110.

The PID 110 preferably contains user attributes stored in a user information database. The user attributes may contain such information as a user identifier, schedule information, contact information (including encryption and/or authentication keys corresponding to one or more of the contacts), and other information that is associated with a user of the PID 110. The PID 110 includes a user interface allowing a user to enter and retrieve data. In a preferred embodiment, the user interface includes a pressure-sensitive display that allows a user to enter input with a stylus or other device. An example of a PID with such an interface is a PDA (Personal Digital Assistant), such as one of the Palm™ series of PDAs offered by 3Com® Corporation. The PID 110 may include other functionality, such as wireless phone or two-way radio functionality.

Link 109 is a point-to-point link, and may be entirely or partially wireless, or it may be a hard-wired connection. The link 109 is preferably a wireless link, such as an infrared link specified by the Infrared Data Association (IrDA) ~~(see www.irda.org for further information)~~ or a radio frequency (RF) link, such as a link according to the

Bluetooth specification ~~(see www.bluetooth.com for further information)~~. However, the point-to-point link might also be a hardwired connection, such as an RS-232 serial port.

In one embodiment, the voice communication devices 108 and 118 each include a handset with a receiver and transmitter similar or identical to handsets of traditional circuit-switched telephones. A console on which the handset sits may include the voice processing system, a display, and a keypad for example.

Please, replace the paragraph starting on line 12 of page 39 of the disclosure with the following paragraph:

In a second method for resolving a shared secret between the first PID 210a and the second PID 220a, one of the PIDs (such as the first PID 210a) begins transmitting a request to resolve a shared secret to the other PID (such as the second PID 220a). The second PID 220a may transmit a response message to the first PID 210a accepting or rejecting the request to resolve the shared secret. If the second PID 220a transmits an acceptance response, several options exist for the next step. ~~On~~ <u>One</u> option is for both PIDs to transmit a suggested shared secret to the other PID and to select one of the shared secrets based on predetermined criteria, such as choosing the larger number if the shared secret is a number. Other exemplary criteria could include choosing based on having the smallest number of duplicate alphanumeric characters within the shared secret, or choosing an average of two shared secret numbers. Upon agreeing on a shared secret, the PIDs should each store the shared secret in a user attribute database (such as in a private "encryption and/or authentication" field in an address book application) located on each PID.

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